

Title (en)
METHOD FOR MANUFACTURING METAL CATALYST HAVING INORGANIC FILM DEPOSITED THEREON BY MEANS OF ALD PROCESS INTO WHICH MAINTENANCE STEP IS INTRODUCED, AND METAL CATALYST MANUFACTURED THEREBY

Title (de)
VERFAHREN ZUR HERSTELLUNG EINES METALLKATALYSATORS MIT DARAUFGABGESCHIEDENEM ANORGANISCHEM FILM MITTELS ALD-VERFAHREN UND DAMIT HERGESTELLTER METALLKATALYSATOR

Title (fr)
PROCÉDÉ DE FABRICATION D'UN CATALYSEUR MÉTALLIQUE SUR LEQUEL EST DÉPOSÉ UN FILM INORGANIQUE AU MOYEN D'UN PROCÉDÉ ALD DANS LEQUEL UNE ÉTAPE DE MAINTENANCE EST INTRODUITE, ET CATALYSEUR MÉTALLIQUE AINSI FABRIQUÉ

Publication
EP 4134162 A1 20230215 (EN)

Application
EP 21784346 A 20210331

Priority
• KR 20200042645 A 20200408
• KR 2021003976 W 20210331

Abstract (en)
The present invention relates to a method for manufacturing a metal catalyst having an inorganic film deposited thereon using an atomic layer deposition (ALD) process. More specifically, the present invention aims to provide optimal process conditions by introducing a maintenance step into an ALD process. Accordingly, it is possible to uniformly deposit the inorganic film even on the internal structure of a porous catalyst and to provide excellent catalytic activity and sintering prevention effect.

IPC 8 full level
B01J 37/02 (2006.01); **B01J 23/42** (2006.01); **C23C 16/40** (2006.01); **C23C 16/44** (2006.01); **C23C 16/455** (2006.01)

CPC (source: EP KR)
B01J 23/42 (2013.01 - EP KR); **B01J 35/398** (2024.01 - EP); **B01J 37/0215** (2013.01 - KR); **B01J 37/024** (2013.01 - KR); **B01J 37/34** (2013.01 - EP); **C23C 16/045** (2013.01 - EP); **C23C 16/403** (2013.01 - EP KR); **C23C 16/405** (2013.01 - EP); **C23C 16/4408** (2013.01 - KR); **C23C 16/4417** (2013.01 - EP KR); **C23C 16/45527** (2013.01 - EP); **C23C 16/45555** (2013.01 - EP KR)

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA ME

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
EP 4134162 A1 20230215; **EP 4134162 A4 20240717**; KR 102522111 B1 20230414; KR 20210125226 A 20211018; WO 2021206356 A1 20211014

DOCDB simple family (application)
EP 21784346 A 20210331; KR 20200042645 A 20200408; KR 2021003976 W 20210331